

Name: \_\_\_\_\_

### p1029: Combine Like Terms (v18)

#### Example

Combine like terms.

$$x^2 + 7x^2 - 9 + 3 - 8 - 4x - x + 2x^2 - 6x + 6$$

#### Answer

Combine the quadratic terms.

$$x^2 + 7x^2 + 2x^2 \equiv 10x^2$$

Combine the linear terms.

$$-4x - x - 6x \equiv -11x$$

Combine the constant terms.

$$-9 + 3 - 8 + 6 \equiv -8$$

The final result:

$$10x^2 - 11x - 8$$

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#### Question 1

Combine like terms.

$$2x^2 + 4x + 3 + 8x - 5x - 4x^2 + 9 - 2 - x^2 - 3$$

$$-3x^2 + 7x + 7$$

**Question 2**

Combine like terms.

$$4x^2 + 6x^2 + 9x - 4 - 9 + 3x + 2x - x^2 + 5 - 2x^2$$

$$7x^2 + 14x - 8$$

**Question 3**

Combine like terms.

$$-9x - 4x^2 + 4 + 7 - 8x^2 + x - x^2 - 7 - 6x + 6x^2$$

$$-7x^2 - 14x + 4$$

**Question 4**

Combine like terms.

$$-8x + 9 + x^2 - x^2 + 2x^2 - 9 + 7x + 8 - 7x - 3$$

$$2x^2 - 8x + 5$$